

1.8m RxTx Class IIH Antenna System



Type 184H Antenna Product Specification

- ISO 9001:2008
Certificate Of Registration



RF Performance

	MODEL#	184HC* C Band	184HK* Ku Band
Effective Aperture.		1.8m (71in)	
Operating Frequency	Tx.	5.850 - 6.725 GHz	13.75-14.50 GHz
	Rx.	3.400 - 4.200 GHz	10.70-12.75 GHz
Polarization.		Linear Orthogonal	
Gain (±0.2 dB)	Tx.	39.3 dBi @ 6.1 GHz	46.7 dBi @ 14.3 GHz
	Rx.	35.4 dBi @ 3.9 GHz	45.0 dBi @ 11.7 GHz
3dB Beamwidth	Tx.	2.0° @ 6.1 GHz	0.8° @ 14.3 GHz
	Rx.	3.0° @ 3.9 GHz	1.1° @ 11.2 GHz
Sidelobe Envelope (Tx, Co-Pol dB)		Mainbeam < Θ < 20°	29 - 25 Log Θ dB
		20° < Θ < 26.3°	-3.5 dB
		26.3° < Θ < 48°	32-25 Log Θ dB
		48° < Θ < 180°	-10 dB
Antenna Cross-Polarization (within 1dB contour)	Tx.	30dB (on axis)	29 dB
	Rx.	30dB (on axis)	21 dB
Antenna Noise Temperature		10° Elev.	41° K 43° K
		20° Elev.	36° K 28° K
		30° Elev.	33° K 23° K
VSWR	Tx.	1.3:1	1.3:1
	Rx.	1.5:1	1.5:1
Isolation (Port to Port)	Tx.	60 dB	90 dB
	Rx.	60 dB	40 dB
Feed Interface	Tx.	Type N or CPR-137	WR75 Flat Flange
	Rx.	CPR-137	WR75 Flat Flange

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester	
Antenna Optics	One-Piece Offset Feed Prime Focus	
Mount Type	Elevation over Azimuth	
Maximum Radio Weight	11 kg or 25 lbs for RF Electronics	
Elevation Adjustment Range	10° - 90° Continuous Fine Adjustment	
Azimuth Adjustment Range	360° Continuous, ±10° Fine Adjustment	
Mast Pipe Size	5" or 5.56" (127mm or 141mm) diam.	
Wind Loading.	Operational	105 km/h (65 mph)
	Survival	241 km/h (150 mph)
Temperature	-50°C to +80°C	
Humidity	0 to 100% (Condensing)	
Atmosphere	Standard Hardware Meets 500 Hour	
	Salt Spray Test Requirements (ASTM B-117)	
Solar Radiation.	360 BTU/h/ft2	
Shock and Vibration	As Encountered During Shipping and Handling	

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